Sequence Listing

(1) SEQ ID NO:1

(A) Length: 2096 base pairs (B) Type: nucleic acid

1 ctcctctgct cctcgaagaa ggccagggcg gggctgccgc aagttttgac attttcgcag 61 cggagacgcg cgcgggcact ctcgggccga cggctgcggc ggcggccgac cctccagagc 121 cccttagtcg cgccccggcc ctcccgctgc ccggagtccg gcggccacga ggcccagccg 181 cgtcctcccg cgcttgctcg cccggcggcc gcagccatgt cccgggggcc cgaggaggtg

241 aaccggctca cggagagcac ctaccggaat gttatggaac agttcaatcc tgggctgcga

301 aatttaataa acctggggaa aaattatgag aaagctgtaa acgctatgat cctggcagga 361 aaagcctact acgatggagt ggccaagatc ggtgagattg ccactgggtc ccccgtgtca

421 actgaactgg gacatgtcct catagagatt tcaagtaccc acaagaaact caacgagagt

481 cttgatgaaa attttaaaaa attccacaaa gagattatcc atgagctgga gaagaagata

541 gaacttgacg tgaaatatat gaacgcaact ctaaaaagat accaaacaga acacaagaat

601 aaattagagt etttggagaa atcccaaget gagttgaaga agatcagaag gaaaagecaa

661 ggaagccgaa acgcactcaa atatgaacac aaagaaattg agtatgtgga gaccgttact

721 tetegteaga gtgaaateea gaaatteatt geagatggtt geaaagagge tetgettgaa

781 gagaagagge gettetgett tetggttgat aageaetgtg getttgeaaa ceacatacat

841 tattateact tacagtetge agaactactg aatteeaage tgeeteggtg geaggagace

901 tgtgttgatg ccatcaaagt gccagagaaa atcatgaata tgatcgaaga aataaagacc

961 ccagceteta ecceegtgte tggaacteet caggetteae ccatgatega gagaageaat

1021 gtggttagga aagattacga caccetttet aaatgeteae caaagatgee eeeegeteet 1081 teaggeagag eatataceag teeettgate gatatgttta ataacceage eaeggetgee

1141 ccgaattcac aaagggtaaa taattcaaca ggtacttccg aagatcccag tttacagcga

1201 tcagtttcgg ttgcaacggg actgaacatg atgaagaagc agaaagtgaa gaccatcttc

1261 ccgcacactg cgggctccaa caagacetta ctcagctttg cacagggaga tgtcatcacg

1321 ctgctcatcc ccgaggagaa ggatggctgg ctctatggag aacacgacgt gtccaaggcg

1381 aggggttggt tcccgtcgtc gtacacgaag ttgctggaag aaaatgagac agaagcagtg

1441 acceptecca ceccaagece cacaccagte agaageatea geaccepteaa ettetetegae

1501 aatagcagtg ttgtcatccc cccacccgac tacttggaat gettgtccat gggggcagct

1561 geegacagga gageagatte ggeeaggaeg acatecacet ttaaggeece agegteeaag

1621 cccgagaccg cggctcctaa cgatgccaac gggactgcaa agccgccttt tctcagcgga

1681 gaaaacccct ttgccactgt gaaactccgc ccgactgtga cgaatgatcg ctcggcaccc 1741 atcattcgat gagaggacag ccaaggactc tcccgggcct ctccggttct cccttgcgga

1801 atgatgggcg catcetgtet gecaegtget gaeggteggg aagetteagt ggagaggeet

1861 aactctaatg tegeetgett aagcaaatca tgettetetg ttteaegtag ttgggttgae

1921 aagtttetge etttaagata aatgagtaat agtetaatga eeageteage eatttaaaat 1981 attttettee tattetgtte aagaaacagt aaaettggtt teaatettta aaaaaaaaa

(2) SEQ ID NO:2

(A) Length: 511 amino acids

(B) Type: amino acid

1 msrgpeevnr ltestyrnvm eqfnpglrnl inlgknyeka vnamilagka yydgvakige 61 iatgspvste lghvlieiss thkklnesld enfkkfhkei ihelekkiel dvkymnatlk 121 ryqtehknkl esleksqael kkirrksqgs rnalkyehke ieyvetvtsr qseiqkfiad 181 gckealleek rrfcflvdkh cgfanhihyy hlqsaellns klprwqetcv daikvpekim 241 nmieeiktpa stpvsgtpqa spmiersnvv rkdydtlskc spkmppapsg raytsplidm 301 fnnpataapn sqrvnnstgt sedpslqrsv svatglnmmk kqkvktifph tagsnktlls 361 faqgdvitll ipeekdgwly gehdvskarg wfpssytkll eeneteavtv ptpsptpvrs 421 istvnlsens svvipppdyl eclsmgaaad rradsartts tfkapaskpe taapndangt 481 akppflsgen pfatvklrpt vtndrsapii r

(3) SEQ ID NO:3

(A) Length: 1794 base pairs (B) Type: nucleic acid

1 cacatataat aatagcaact cctggtcgac tgattgacca cttgaaacct ttcgtatttt 61 ccaagtgctg gcaagcgctt cctgcgcagg ccgaggcgac ctggagtttg tgacgctgtg 121 atggtetaga ggetggagat teaagatetg ggtgeeatea ttttetggtt etgttgatga 181 ccctcttcca ggttacatac agettacate ttgcatecte aagegttttt ettataagge 241 taaaaattca caaagcatat atcaatgaat caggaggatc tagatccgga tagtactaca 301 gatgtgggag atgttacaaa tactgaagaa gaacttatta gagaatgtga agaaatgtgg 361 aaagatatgg aagaatgtea gaataaatta teaettattg gaactgaaac aeteaeegat 421 tcaaatgete agetateatt gttaattatg caagtaaaat gtttaacege tgaacteagt 481 caatggcaga aaaaaacacc tgaaacaatt cccttgactg aagacgttct cataacatta 541 ggaaaagaag agttccaaaa gctgagacaa gatcttgaaa tggtactgtc cactaaggag 601 tcaaagaatg aaaagttaaa ggaagactta gaaagggaac aacggtggtt ggatgaacag 661 caacagataa tggaatctct taatgtacta cacagtgaat tgaaaaataa ggttgaaaca 721 ttttctgaat caagaatett taatgaactg aaaactaaaa tgettaatat aaaagaatat 781 aaggagaaac tettgagtac ettgggegag tttetagaag accattttee tetgeetgat 841 agaagtgtta aaaagaaaaa gaaaaacatt caagaatcat ctgtaaacct gataacactg 901 catgaaatgt tagagattet tataaataga ttatttgatg ttecacatga tecatatgte 961 aaaattagtg atteettttg gecaeettat gttgagetge tgetgegtaa tggaattgee 1021 ttgagacate cagaagatee aaccegaata agattagaag ettteeatea gtaaaaggat 1081 gttttctttt ttcacacagt aaaaattctt atcattcaag gatattggaa ccacaggact 1141 atttggataa aaaacattat ttgcaaatta atgcgcatag tacttttatt gcaaaatggc 1201 atgtgctgcc atctattatt catttttaaa tggtcatttc ttattcagtg agtgctttag 1261 tgttttaaac tatatggata agaatgcagg tagataatat tctaggcata aaacatttaa 1321 tgtaccttac ctcatgcaat attctttgga ttctttgttg atttatgata ttgctaatat 1381 aatatttet taaaatatat aacaatatet tttatgeatt tgagtteeag etggtgette 1501 gtaatatetg aggtggeata atttaaaaat atttageaaa tttgttteat atataetgte 1561 ttatttctag atttgtttaa aattggaata tgaaaaacta atggataaag ctagcataaa 1621 attgatattt tagtttgtat tattaatata teatgttaee ttatatatta atetaetett 1681 gattetgeta attattacca acaaaattgt atteatgaca ttttattaat cetetgtgaa

(4) SEQ ID NO:4

(A) Length: 269 amino acids

(B) Type: amino acid

1 mnqedldpds ttdvgdvtnt eeelirecee mwkdmeecqn klsligtetl tdsnaqlsll

- 61 imqvkcltae lsqwqkktpe tipltedvli tlgkeefqkl rqdlemvlst keskneklke
- 121 dleregrwld egggimesIn vlhselknkv etfsesrifn elktkmlnik eykekllstl
- 181 gefledhfpl pdrsykkkkk nigessynli tlhemleili nrlfdyphdp yykisdsfwp
- 241 pyvelllrng ialrhpedpt rirleafhq

(5) SEQ ID NO:5

(A) Length: 1660 base pairs (B) Type: nucleic acid

1 gecaggaaat geeetggagt gtgtgteace tgteeaggae gaettgttga tteecaggag

- 61 ggccgccttt ccggtctggg tccccgagag gactgccttg ctcacctgtc ccctcggcgc
- 121 ggccccgggg ageteccgag aggcccccgg gategetgge cetecgaact ccacagcaat
- 181 gagcaagttg ggcaagttet ttaaaggggg eggetettet aagageegag eegeteeeag
- 241 tecceaggag gecetggtee gaetteggga gaetgaggag atgetgggea agaaacaaga
- 301 gtacctggaa aatcgaatcc agagagaaat cgccctggcc aagaagcacg gcacgcagaa
- 361 taagegaget geattaeagg eactaaagag aaagaagagg ttegagaaac ageteactea
- 421 gattgatgge acaettteta ceattgagtt ceagagagaa geeetggaga acteacaeae
- 481 caacactgag gtgttgagga acatgggctt tgcagcaaaa gcgatgaaat ctgttcatga
- 541 aaacatggat ctgaacaaaa tagatgattt gatgcaagag atcacagagc aacaggatat
- 601 cgcccaagaa atctcagaag cattttctca acgggttggc tttggtgatg actttgatga
- 661 ggatgagttg atggcagaac ttgaagaatt ggaacaggag gaattaaata agaagatgac
- 721 aaatateege etteeaaatg tgeetteete tteteteeca geacageeaa atagaaaace
- 781 aggeatgteg tecaetgeae gtegateeeg ageageatet teceagaggg eagaagaaga
- 841 ggatgatgat atcaaacaat tggcagcttg ggctacctaa actaaaacac atttttgata
- 901 cctaaattaa tgagctatag ataaaatata aaaaatgttt ttaccaagtt cagaagttaa
- 961 caaagactet getttataat tatattgaat gaataattgt gttttaagee teetaagtaa
- 1021 aagtaaaaaa ggagtcatgt gcatacatag aatcagtgat ggaggccagg cacggtatct
- 1081 catgectata ateccageae tttgggagge tgaggeagtt gagaceagga gttegagtee
- 1141 agectgacca acatgaagaa accetgtetg tactaaaaat acaaaaatta geeggacatg
- 1201 gtggcaggca cetgtaatee eagetaettg ggaggetgag teaggagaat egettgagee
- 1261 caggagatgg aggttgcagt gagccaagat catgccactg cactccagac tgggcaacag
- 1321 agggagacte egteteaaaa actaaaaaaa aaaaatacat ttagtatage ggggggtggg
- 1381 ggggagaaat aatgttattt cetatgegaa tgaegtgtat eeetgtacce atggtaaatg
- 1441 taaatatact gtgtctcttt tgggagagcc ttttagtaga ggagtcttat atgagtctct
- 1501 acataagtag tttcacttga gttttgcagt ttgaaatctt aaaggagctt taattgacat
- 1561 ttattatacc aattaagctt ggaatggggc aatggatgca tttcccaaaa cgtgtgaaag
- 1621 cactaacage ttatattgct gaatgagaat ctcctgggtg

(6) SEQ ID NO:6

(A) Length: 233 amino acids

(B) Type: amino acid

1 msklgkffkg ggssksraap spqealvrlr eteemlgkkq eylenriqre ialakkhgtq

- 61 nkraalqalk rkkrfekqlt qidgtlstie fqrealensh tntevlrnmg faakamksvh
- 121 enmdlnkidd Imqeiteggd iageiseafs grygfgddfd edelmaelee legeelnkkm
- 181 tnirlpnvps sslpaqpnrk pgmsstarrs raassqraee edddikqlaa wat
- (7) SEQ ID NO:7
 - (C) Length: 1666 base pairs
 - (D) Type: nucleic acid
 - 1 agegggegeg gggetgegag etagggeggg agaaggageg eggggaggae gtacettgtg
 - 61 agatgcgage eggecaacag ettgeaagea tgeteegetg gaccegagee tggaggetee
 - 121 cgcgtgaggg actcggcccc cacggcccta gcttcgcgag ggtgcctgtc gcacccagca
 - 181 gcagcagegg eggeegaggg ggegeegage egaggeeget teegetttee tacaggette
 - 241 tggacgggga ggcagccete ceggcegteg tetttttgca egggetette ggcagcaaaa
 - 301 ctaacttcaa ctecategee aagatettgg eecageagae aggeegtget gaeggtggat
 - 361 getegtaace aeggtgacag ecceeacage ceagacatga getaegagat eatgageeag
 - 421 gacctgeagg accttctgee ceagetggge etggtgeeet gegtegtegt tggeeaeage
 - 481 atgggaggaa agacagccat getgetggca etacagaggg tgagccgccc atgtetgggg
 - 541 cctcctccca ttcagtatat accetgaggg ccctgcagge aacctgggac tcacatgate
 - 601 gttggatgac caagttcagg ctccaggagc catgcctgag actccctatg tctgcctaag
 - 661 actggtccca gttcggttct ctcccacagc cagagctggt ggaacgtctc attgctgtag
 - 721 atatcagccc agtggaaagc acaggtgtct cccactttgc aacctatgtg gcagccatga
 - 781 gggccatcaa categeagat gagetgeeee geteeegtge eegaaaactg geggatgaac
 - 841 ageteagtte tgteateeag gacatggeeg tgeggeagea cetgeteaet aacetggtag
 - 901 aggtagacgg gcgcttcgtg tggagggtga acttggatgc cctgacccag cacctagaca
 - 961 agatettgge ttteccaeag aggeaggagt cetacetegg gecaacacte ttteteettg
 - 1021 gtggaaactc ccagttcgtg catcccagcc accaccctga gattatgcgg ctcttccctc
 - 1081 gggcccagat gcagacggtg ccgaacgctg gccactggat ccacgctgac cgcccacagg
 - 1141 actteatage tgecateega ggetteetgg tetaagagtt getggeaaga agatggeegg
 - 1201 gegtggtgge teatgeetgt aatteeagea etttgggagg etaaggeggg aggatgaett
 - 1261 gaggecagga gttggagacc agectggeca acatggtgaa accetgtete tactaaaaat
 - 1321 acaaaaatta geetggegtg gtggtgeaca eetgtaatee eagetaetet ggaggetgag
 - 1381 gcaggagaat cacttgaacc ctggaggcag aggttgcaat gagccgagat cacaccacta
 - 1441 cactecagee taggeaacag ageaagaete tgteteaaaa aaaacaaaac aaaaaggagg
 - 1501 cacaaaacce caggetteaa gtetetgeag cetgeteeae atttgggeae agaaggaete
 - 1561 agacaggcac tgtgtgggca cgaggtttta caggggtggt cagacctcag gctttaatga
 - 1621 ataaagacac tactccccaa aaaaaaaaaa aaaaaaaaa aaaaaa
- (8) SEQ ID NO:8
 - (A) Length: 101 amino acids
 - (B) Type: amino acid
 - 1 mragqqlasm lrwtrawrlp reglgphgps farvpvapss ssggrggaep rplplsyrll 61 dgeaalpavv flhglfgskt nfnsiakila qqtgradggc s
- (9) SEQ ID NO:9
 - (A) Length: 23 base pairs

(B) Type: nucleic acid

GCTTCTGCTTTCTGGTTGATAAG

(10) SEQ ID NO:10

(A) Length: 22 base pairs(B) Type: nucleic acid

GATTTCTCTGGCACTTTGATG

(11) SEQ ID NO:11

(A) Length: 22 base pairs(B) Type: nucleic acid

GAAACACTCACCGATTCAAATG

(12) SEQ ID NO:12

(A) Length: 22 base pairs(B) Type: nucleic acid

GCTTTTGGAACTCTTCTTTTCC

(13) SEQ ID NO:13

(A) Length: 22 base pairs(B) Type: nucleic acid

AGGGCAGAAGAAGAGGATGATG

(14) SEO ID NO:14

(A) Length: 22 base pairs(B) Type: nucleic acid

GTGCTGGGACTATAGGCATGAG

(15) SEQ ID NO:15

(A) Length: 20 base pairs(B) Type: nucleic acid

CTGACGGTGGATGCTCGTAA

(16) SEQ ID NO:16

(A) Length: 22 base pairs(B) Type: nucleic acid

GTGCCTGTCTGAGTCCTTCTGT

(17) SEQ ID NO:17

(A) Length: 21 base pairs(B) Type: nucleic acid

AAGCACTGTGGCTTTGCAAAC

(18) SEQ ID NO:18

(A) Length: 21 base pairs(B) Type: nucleic acid

AACACTCACCGATTCAAATGC